

## CHAPTER III.

## GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

## DEPARTMENTAL OPERATIONS.

59. A comparative statement of timber and firewood departmentally worked during the year is as follows :—

| No.       | Division.           | Year.          | IN CUBIC FEET. |           |
|-----------|---------------------|----------------|----------------|-----------|
|           |                     |                | Timber.        | Firewood. |
| 1         | North Tháná ... ..  | 1895-96 ... .. | 10,485         | 37,143    |
| 2         | South Tháná ... ..  |                |                |           |
| 3         | Central Tháná... .. | 1896-97 ... .. | 25,314         | 26,961    |
| 4         | Surat ... ..        | 1895-96 ... .. | 46,109         | 826       |
|           |                     | 1896-97 ... .. | 86,190         | 20,900    |
| 5         | Panch Maháls ... .. | 1895-96 ... .. | 44,861         | 104,480   |
|           |                     | 1896-97 ... .. | 6,423          | 69,715    |
| Total ... |                     | 1895-96 ... .. | 101,455        | 142,449   |
|           |                     | 1896-97 ... .. | 117,927        | 117,576   |

60. It has been impossible to compare the figures by Divisions in the Tháná District owing to the change from two to three Divisions effected in the middle of the working season. The details by Divisions for the current season are given in tabular form to facilitate comparison next year :—

| Division.           | IN CUBIC FEET. |           |
|---------------------|----------------|-----------|
|                     | Timber.        | Firewood. |
| North Tháná ... ..  | 9,375          | 17,714    |
| Central Tháná... .. | 8,985          | .....     |
| South Tháná ... ..  | 6,954          | 9,247½    |
| Total ...           | 25,314         | 26,961½   |

These figures represent the outturn of wind-falls and of line-cutting in North Tháná. Notwithstanding that some coupes remained unsold, it was not found necessary to work them departmentally.

61. In Surat the figures represent the outturn of the line-cutting on the Gáikwári border.

And in Panch Maháls they also represent line-cutting. The agricultural dépôts having failed, as they were bound to fail as they have always failed whenever tried, no wood to stock them was cut; hence the large decrease in this Division.

62. The following is an abstract of the details given in Form No. 59 :—

| Number. | Division.         | BALANCE ON 1ST JULY 1896. |            |        | OUTTURN OF THE YEAR. |            |         | Total of columns 5 and 8. | DISPOSED OF DURING THE YEAR. |            |         | BALANCE ON THE 30TH JUNE 1897. |            |        |
|---------|-------------------|---------------------------|------------|--------|----------------------|------------|---------|---------------------------|------------------------------|------------|---------|--------------------------------|------------|--------|
|         |                   | Timber.                   | Fire-wood. | Total. | Timber.              | Fire-wood. | Total.  |                           | Timber.                      | Fire-wood. | Total.  | Timber.                        | Fire-wood. | Total. |
| 1       | 2                 | 3                         | 4          | 5      | 6                    | 7          | 8       | 9                         | 10                           | 11         | 12      | 13                             | 14         | 15     |
|         |                   | C. ft.                    | C. ft.     | C. ft. | C. ft.               | C. ft.     | C. ft.  | C. ft.                    | C. ft.                       | C. ft.     | C. ft.  | C. ft.                         | C. ft.     | C. ft. |
| 1       | North Tháná ...   | ...                       | 500        | 500    | 9,375                | 17,714     | 27,089  | 27,589                    | 8,090                        | 18,180     | 26,270  | 1,285                          | 34         | 1,319  |
| 2       | Central Tháná ... | 1,569                     | ...        | 1,569  | 8,985                | ...        | 8,985   | 10,554                    | 9,619                        | ...        | 9,619   | 935                            | ...        | 935    |
| 3       | South Tháná ...   | ...                       | ...        | ...    | 6,954                | 9,247      | 16,201  | 16,201                    | 6,954                        | 9,247      | 16,201  | ...                            | ...        | ...    |
| 4       | Surat ...         | 6,604                     | ...        | 6,604  | 86,790               | 20,900     | 107,690 | 113,694                   | 71,847                       | 4,600      | 76,447  | 20,947                         | 16,800     | 37,247 |
| 5       | Panch Maháls ...  | 16,916                    | 49,815     | 66,731 | 6,423                | 69,715     | 76,138  | 142,869                   | 12,223                       | 100,446    | 112,669 | 10,416                         | 19,184     | 29,600 |
|         | Total ...         | 23,089                    | 50,315     | 73,404 | 117,927              | 117,574    | 235,501 | 310,907                   | 109,433                      | 132,373    | 241,806 | 32,583                         | 35,518     | 68,101 |

#### REMOVAL OF PRODUCE BY PURCHASERS.

63. As recorded in paragraph 28, 275 coupes were marked for felling in Tháná; of these 227 only found purchasers, but in a few cases offers having been received for old coupes left unsold, 15 such were sold for exploitation, making 242 coupes exploited in all.

The result of this exploitation as compared with the timber exploitation of last year were as follows :—

| No. | Division.        | COUPES EXPLOITED. |        |           |                         |          |        |           |                         |
|-----|------------------|-------------------|--------|-----------|-------------------------|----------|--------|-----------|-------------------------|
|     |                  | 1895-96.          |        |           |                         | 1896-97. |        |           |                         |
|     |                  | Number.           | Area.  | Receipts. | Average price per Acre. | Number.  | Area.  | Receipts. | Average price per Acre. |
|     |                  |                   | Acres. | Rs.       | Rs. a. p.               |          | Acres. | Rs.       |                         |
| 1   | North Tháná ...  | 90                | 5,147  | 2,25,045  | 43 8 0                  | 87       | 4,639  | 1,80,271  | 38-9                    |
| 2   | South Tháná ...  | 75                | 4,024  | 1,14,215  | 27 8 0                  | 75       | 4,113  | 87,134    | 21-1                    |
| 3   | Central Tháná... | 75                | 3,781  | 1,32,369  | 35 0 0                  | 80       | 4,615  | 1,17,395  | 25-4                    |
|     | Total ...        | 240               | 12,952 | 4,71,659  | 36-4                    | 242      | 13,367 | 3,84,800  | 28-5                    |

64. It will be noted that there is a falling off of over 20 per cent. in the rate per acre realized. Besides the inevitable effects of the plague in Bombay and famine up-country—the former meaning difficulty in getting money owing to the money-lenders having fled from Bombay, and the latter that, as well as a reduced market there was an increase in the expense. Some of this decrease must undoubtedly be put down to increased efficiency of protection and number and quality of reserves. For the year's working an amended form of contract was adopted drawn under rules under the Forest Act. This gave summary power of fining to the Divisional Forest Officer and acted as a deterrent with those inclined to fraud. There were no serious cases of theft of reserved trees as last year.

65. The gross produce yield of the coupes worked is estimated by the Divisional Forest Officer as follows :—

| No. | Division.          | TIMBER IN CUBIC FEET. |             | Firewood, Cubic feet. |
|-----|--------------------|-----------------------|-------------|-----------------------|
|     |                    | Teak.                 | Junglewood. |                       |
| 1   | North Tháná ...    | 435,626               | 153,640     | 1,336,421             |
| 2   | South Tháná ...    | 373,574               | 58,897      | 832,031               |
| 3   | Central Tháná ...  | 277,809               | 97,039      | 657,781               |
|     | Total, 1896-97 ... | 1,087,009             | 309,576     | 2,826,233             |
|     | Total, 1895-96 ... | 2,224,186             | 533,690     | 8,771,765             |

The great difference of these figures as compared with those of last year will be noted. I recorded my opinion on the accuracy of the figures given in paragraph 97 of last year's report and have also referred to the subject *ante* paragraph 29. The figures given in past years were based on an imperfect registration of actual yield of material and, moreover, the system of conversion into cubic feet also varied in the several Divisions. As recorded a common system of classification for the three Tháná Divisions was adopted in the past season and to a certain extent was introduced, and at the same time co-efficients of conversion of these classes into cubic feet were discussed and adopted by all the Divisional Forest Officers. That these classes are the best possible or the co-efficients accurate cannot be claimed, but they represent a beginning and by means of experiments and by experience they can be corrected year by year. The classes and co-efficients actually adopted for this report may usefully be recorded here for further reference. They are as follows:—

- A. 10' long or under = "Kadis."
  - a. Below 20" girth = III reckoned as 1 cubic foot.
  - b. Between 20" and 30" girth = II reckoned as 3 cubic feet.
  - c. Between 30" and 40" girth = I reckoned as 5½ cubic feet.
- B. Over 10' long = Rafters or "Wásá."
  - a. Below 20" girth = III reckoned as 2 cubic feet.
  - b. Between 20" and 30" = II reckoned as 6 cubic feet.
  - c. Between 30" and 40" = I reckoned as 11 cubic feet.
- C. Logs over 40" in girth are actually measured and cubic contents calculated.
- D. Firewood is calculated at 17 solid cubic feet per cart-load.

66. It has been arranged to collect further data of comparative girth at base and centre of log, for as the former is that necessarily taken and recorded, it is necessary, in order to increase the accuracy of the co-efficient of cubic contents, to obtain a reliable co-efficient to reduce the recorded base girth to the probable centre girth.

67. There were no cuttings in Málki lands pending a reference which was before Government.

### Surat.

68. The timber and firewood removed by purchasers was as follows:—

| Year.          | Timber.   | Firewood. |
|----------------|-----------|-----------|
|                | Cubic ft. | Cubic ft. |
| 1895-96 ... .. | 106,466   | 76,085    |
| 1896-97 ... .. | 30,714    | 39,460    |

In addition to the above 528 teak trees were sold at one rupee per tree growing on occupied lands in the Chikhli and Bulsár Ranges and in the Mándvi Range at a valuation.

### Panch Mahals.

69. The outturn in this Division was entirely from teak timber sold standing on Government waste and occupied lands outside forests. The quantity of the outturn was as follows:—

| Year.          | Timber.   | Firewood. |
|----------------|-----------|-----------|
|                | Cubic ft. | Cubic ft. |
| 1895-96 ... .. | 421,862   | 120,512   |
| 1896-97 ... .. | 631,788   | 137,790   |

## BAMBOOS.

70. The following is a comparison of the out-turn in the years 1895-96 and 1896-97 :—

| No. | Division.         | 1895-96.    |             |           |           | 1896-97.    |             |           |           |
|-----|-------------------|-------------|-------------|-----------|-----------|-------------|-------------|-----------|-----------|
|     |                   | Cart-loads. | Head-loads. | Number.   | Receipts. | Cart-loads. | Head-loads. | Number.   | Receipts. |
|     |                   |             |             |           | Rs.       |             |             |           | Rs.       |
| 1   | North Tháná ...   | 497         | 1,190       | 10,664    | 687       | 3,727       | 3,018       | 227,050   | 10,277    |
| 2   | South Tháná... .. | 5,247       | 5,522       | 1,193,719 | 17,242    | 370         | 559         | 4,102     | 302       |
| 3   | Central Tháná ... | ...         | ...         | .....     | ...       | 961         | 686         | 1,092,756 | 3,613     |
| 4   | Surat ... ..      | ...         | ...         | 567,870   | 16,016    | ...         | ...         | 360,454   | 19,949    |
| 5   | Panch Maháls ...  | 2           | ...         | 33,225    | 518       | 15          | ...         | 63,224    | 1,115     |
|     | Total ...         | 5,746       | 6,712       | 1,805,478 | 34,463    | 5,073       | 4,263       | 1,747,586 | 35,256    |

In the Surat Division nearly 2 lacs of bamboos sold from the Dáng forests were not exploited on account of the plague at Bulsár, which town is the centre where bamboos from the Dángs are taken for local sale as well as export. On the representation of the contractors I was obliged to extend the contracts to the current year. The work of the contractors was handicapped by the refusal of cart-men to remove the bamboos to the Bulsár bundar, where the plague was raging in consequence of which quarantine was imposed.

## MINOR PRODUCE.

71. The following statement shows the minor produce disposed of during the year compared with that of the last year :—

| Number. | Division.         | Year.    |          |
|---------|-------------------|----------|----------|
|         |                   | 1895-96. | 1896-97. |
| 1       | North Tháná ...   | 6,226    | 625      |
| 2       | South Tháná ...   |          | 4,216    |
| 3       | Central Tháná ... |          | 1,690    |
| 4       | Surat ... ..      | 2,759    | 2,852    |
| 5       | Panch Maháls ...  | 475      | 172      |
|         | Total ...         | 9,460    | 9,555    |

## FREE GRANTS OF FOREST PRODUCE.

72. The following statement shows the free grants of timber made during the year compared with those of the last year :—

| Number. | Division.            | Year.    |          |
|---------|----------------------|----------|----------|
|         |                      | 1895-96. | 1896-97. |
| 1       | North Tháná... ..    | 24       | 40       |
| 2       | South Tháná ... ..   | 207      | 1,072    |
| 3       | Central Tháná ... .. | 113      | 265      |
| 4       | Surat ... ..         | 1,686    | 3,007    |
| 5       | Panch Maháls ... ..  | 2,525    | 31       |
|         | Total ...            | 4,555    | 4,415    |

The total value varies but little from that of last year, the variation in distribution is caused by the greater or less prevalence of fires in particular districts.

72(a). The following form contains the information regarding value of produce removed under rights or granted free or at reduced rates as required by Government Resolution No. 4296, dated 8th June 1897 :—

|                     | Timber.     |        | Fuel.       |        | Bamboos.       |        | Grazing.     | Minor produce. | Total.        |
|---------------------|-------------|--------|-------------|--------|----------------|--------|--------------|----------------|---------------|
|                     | Cubic feet. | Value. | Cubic feet. | Value. | Cubic feet.    | Value. |              |                |               |
|                     |             | Rs.    |             | Rs.    | Right-holders. | Rs.    | Rs. a. p.    | Rs. a. p.      | Rs. a. p.     |
| North Tháná ...     | ...         | ...    | 991,996     | 23,299 | 52,040         | 981    | 42,806 0 0   | 1,260 0 0      | 68,346 0 0    |
| Central Tháná...    | ...         | ...    | ...         | ...    | ...            | ...    | .....        | .....          | .....         |
| South Tháná ...     | ...         | ...    | 22,550      | 5,468  | ...            | ...    | 4,999 6 0    | 4,429 8 0      | 15,896 14 0   |
| Surat ...           | ...         | ...    | 15,000      | 400    | ...            | ...    | 82 4 0       | 500 0 0        | 982 4 0       |
| Panch Maháls...     | ...         | ...    | ...         | ...    | ...            | ...    | .....        | .....          | .....         |
| Total ...           | ...         | ...    | 1,029,546   | 30,167 | 52,040         | 981    | 47,887 10 0  | 6,189 8 0      | 85,225 2 0    |
| <i>Free grants.</i> |             |        |             |        |                |        |              |                |               |
| North Tháná ...     | 105         | 40     | ...         | ...    | Nos.           | ...    | .....        | .....          | 40 0 0        |
| Central Tháná...    | 1,575       | 265    | 500,000     | 50,000 | 5,000          | 230    | 43,511 0 0   | 2,930 0 0      | 96,936 0 0    |
| South Tháná ...     | 3,258       | 1,072  | ...         | ...    | ...            | ...    | 48,686 8 0   | .....          | 49,758 8 0    |
| Surat ...           | 4,558       | 3,007  | ...         | ...    | 6,675          | 240    | .....        | .....          | 3,247 0 0     |
| Panch Maháls...     | 234         | 31     | ...         | ...    | 160            | 3      | .....        | .....          | 34 0 0        |
| Total ...           | 9,730       | 4,415  | 500,000     | 50,000 | 11,835         | 473    | 92,197 8 0   | 2,930 0 0      | 1,50,015 8 0  |
| Grand Total ...     | 9,730       | 4,415  | 1,529,546   | 80,167 | 63,875         | 1,454  | 1,40,085 2 0 | 9,119 8 0      | 2,35,240 10 0 |

## CHAPTER IV.

### FINANCIAL RESULTS.

73. Financially the year has been a disastrous one. While there has been an excess of Rs. 22,444 in expenditure, receipts have fallen off by 2 lákhs. The following are the figures for the year :—

| Year.        | Receipt. | Expenditure. |          | Total.   | Surplus. |
|--------------|----------|--------------|----------|----------|----------|
|              |          | A.           | B.       |          |          |
|              | Rs.      | Rs.          | Rs.      | Rs.      | Rs.      |
| 1895-96 ...  | 7,83,283 | 1,08,221     | 1,89,216 | 2,97,437 | 4,85,846 |
| 1896-97 ...  | 5,83,437 | 1,26,022     | 1,93,859 | 3,19,881 | 2,63,556 |
| Increase ... | ...      | 17,801       | 4,643    | 22,444   | ...      |
| Decrease ... | 1,99,846 | ...          | ...      | ...      | 2,22,290 |

74. The whole deficit falls practically under II-A. In Tháná owing to low prices the sale of coupes produced Rs. 1,20,000 short, while Rs. 12,500 short was collected in Surat owing to the plague interfering with the demand for timber from both the upper and lower Dángs. In the Panch Maháls the sales from Málki numbers was also Rs. 64,000 short mainly owing to low